IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

David R. Hembree

Serial No.: Not yet assigned

Filed: July 22, 2003

For: CHIP ON BOARD AND HEAT SINK

ATTACHMENT METHODS

Examiner: Unknown

Group Art Unit: Unknown

Attorney Docket No.: 3592.8US

(97-0321.08/US)

NOTICE OF EXPRESS MAILING

Express Mail Mailing Label Number: EV325769923US

Date of Deposit with USPS: _____ July 22, 2003

Person making Deposit: Blake Johnson

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Washington, D.C. 20231

Sir:

The present application is a continuation of application Serial No. 09/511,609, filed February 23, 2000, pending, which is a divisional of application Serial No. 09/146,945, filed September 3, 1998, now U.S. Patent 6,117,797, issued September 12, 2000.

Pursuant to M.P.E.P. 2001.06(b), the Examiner is respectfully requested to consider the information of record in the prior applications, and to confirm in the first Office Action on the merits that such art has in fact been reviewed. A PTO-1449 form listing all of the information of record in the prior applications is enclosed herewith.

Attorney Docket: 3592.8US (97-0321.08/US)

This Information Disclosure Statement is filed within three (3) months of the filing date of the above-identified application, and no certification pursuant to 37 C.F.R. § 1.97(c) or a fee pursuant to 37 C.F.R. 1.17(p) is required.

Respectfully submitted,

James R. Duzan

Registration No. 28,393

Attorney for Applicant

TRASKBRITT

P. O. Box 2550

Salt Lake City, Utah 84110-2550

Sames R. Surga

Telephone: (801) 532-1922

Date: July 22, 2003

JRD/sls:djp

Enclosure: Form PTO-1449

Form PTO-1449

INFORMATION DISCLOSURE CITATION IN AN APPLICATION

Docket Number (Optional)				
3592.8US (97-0321.08/US)				

Application Number Not yet assigned

Applicant David R. Hembree

(Use several sheets if necessary)		Filing Date July 22, 2003 Group Art Unit Un			nit Unkn o	own			
		U.S. F	PATENT D	OCUMENTS					
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME		CLASS	SUBCLASS	FILING D		
	4,024,570	05/1977	На	rtmann et al.					
·	4,059,467	11/1977_	Mancke et al.						
	4,059,708	11/1977	He	iss, Jr. et al.			·		
	4,081,825	03/1978	Ko	opman et al.					
	4,143,456	03/1979		Inoue					
	4,264,917	04/1981		Ugon					
<u> </u>	4,300,153	11/1981	Hay	yakawa et al.					
	4,323,914	04/1982	Berr	dlmaier et al.					
	4,358,552	11/1982	Shi	nohara et al.					
	4,507,675	03/1985	Fujii et al.						
	4,602,678	07/1986	Fick		<u> </u>				
	4.628.406	12/1986	Smith et al.						
	*	FOREIG	N PATEN	T DOCUMEN	ΓS				
	DOCUMENT	DATE		COUNTRY		COUNTRY CLASS SUBCLAS	SUBCLASS	Tra	nslation
	NUMBER						YES	NO	
	52-77684	06/1977	Japan		`			├──	
	55-128835	10/1980		Japan		<u> </u>	<u> </u>	├─-	
_	56-4241	01/1981		Japan				 	
	60-94744	05/1985	Japan		-				
=	60-178651	09/1985	Japan					<u> </u>	
		OT	HER DO	CUMENTS	(Inclu	ding Author, Title,	Date, Pertine	nt Pages, Etc.)	
	Crum, Trends in Advanced Component Technologies, Electronic Packaging & Production (January 1998) pages 48-53.								
	Lawing, Vacuum Dispensing of Encapsulants for μBGA Manufacturing, Electronic Packaging & Production (February 1998), pages 87-91.								
		Markstein, Cooling Techniques for Today's Electronics, Electronic Packaging & Production (November 1997), pages 78-82.							
EXAMINER	<u> </u>	DATE CONSIDERED							

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Sheet 2 of 9

Form PTO-1449

INFORMATION DISCLOSURE CITATION

Docket Number (Optional) 3592.8US (97-0321.08/US)

Application Number Not yet assigned

INFORMATION DISCLOSURE CITATION IN AN APPLICATION		Applicant David R.	Applicant David R. Hembree						
(Use several sheets if necessary)			Filing Date July 22, 2	Filing Date July 22, 2003 Gro			Group Art Unit Unknown		
		U.S. PA	TENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING I			
	4,642,671	02/1987	Rohsler et al.						
	4,801,998	01/1989	Okuaki		ļ				
-	4,862,245	08/1989	Pashby et al.						
	4,873,615	10/1989	Grabbe						
	4,931,852	06/1990	Brown et al.						
	4,942,140	07/1990	Ootsuki et al.		<u> </u>				
	4,961,107	10/1990	Geist et al.						
<u> </u>	4,984,059	01/1991	Kubota et al.						
	5,051,275	09/1991	Wong						
·	5,071,787	12/1991	Mori et al.	Mori et al.					
	5,081,067	01/1992	Shimizu et al.		<u> </u>				
	5,101,465	03/1992	Murphy						
	5,108,955	04/1992	Ishida et al.						
	·	FOREIGN	PATENT DOCUMENT	rs					
	DOCUMENT NUMBER	DATE	COUNTRY CLASS SU		SUBCLASS	Translation YES NO			
62-109326		05/1987	Japan	_	 	TES	NO		
·	62-115834	05/1987	Japan	1	 		†		
62-261133		11/1987	Japan				1		
	2-306639								
		ОТН	ER DOCUMENTS	(Inch	uding Author, Title,	Date, Pertine	nt Pages,		
	Smith, Par	ckaging to Beat the He	at, Semiconductor Internationa	l (November 1	1997), pages 7	13-76.			
	Die Attach Products, Johnson Matthey Electronics, Product Data (07/01/94), 6 pages.								
	Product B	ulletin, Dexter Electron	nic Materials Division (undated), 2 pages.					
AMINER	R DATE CONSIDERED								

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

(4)4)

Sheet 3 of 9 Docket Number (Optional) Application Number Form PTO-1449 3592.8US (97-0321.08/US) Not yet assigned INFORMATION DISCLOSURE CITATION Applicant David R. Hembree IN AN APPLICATION (Use several sheets if necessary) Group Art Unit Unknown Filing Date July 22, 2003 U.S. PATENT DOCUMENTS DOCUMENT NUMBER FILING DATE IF APPROPRIATE EXAMINER INITIAL DATE SUBCLASS NAME CLASS 5,120,665 06/1992 Tsukagoshi et al. 09/1992 Eichelberger 5,144,747 5,173,764 12/1992 Higgins, III 5,175,613 12/1992 Barker, III et al. 5,182,173 01/1993 Swei 02/1993 5,184,208 Sakuta et al. 5,194,930 03/1993 Papathomas et al. 5,201,866 04/1993 Mok 06/1993 5,218,759 Juskey et al. 5,233,220 08/1993 Lamson et al. 5,239,200 08/1993 Messina et al. 5,249,101 09/1993 Frey et al. 5,252,853 10/1993 Michii FOREIGN PATENT DOCUMENTS Translation DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS YES NO 4-157758 05/1992 Japan **OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.) **EXAMINER** DATE CONSIDERED

(2-92)

								Sheet 4 of 9	
Form PTO-1449				Docket Number (Optional) 3592.8US (97-0321.08/US) Application Number Not yet assigned					
INFORMATION DISCLOSURE CITATION IN AN APPLICATION			Applicant David R. Hembree						
	(Use several sheets			Filing Date July 22, 2003 Group Art Unit		it Unknown			
U.S. PATENT DOCUMENTS									
EXAMINER INITIAL	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE		
	5,286,679	02/1994	Fai	rnworth et al.					
	5,289,346	02/1994	(Carey et al.					
·	5,291,064	03/1994		Kurokawa					
 	5,304,842	04/1994	Fai	rnworth et al.					
	5,311,060	05/1994	Ro	ostoker et al.					
	5,344,795	09/1994	Н	ashemi et al.					
	5,358,598	10/1994		Chiu		·			
	5,358,904	10/1994	Murakami et al.						
	5,358,906	10/1994	Lee						
	5,371,044	12/1994	Yoshida et al.						
	5,378,924	01/1995	Liang						
	FOREIGN PATENT DOCUMENTS								
	DOCUMENT	DATE	COUNTRY		CLASS	SUBCLASS	Tran	slation	
<u> </u>	NUMBER		COUNTRI			302011150	YES	NO	
			<u> </u>		 				
······································									
									
			<u> </u>				<u> </u>		
·	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							Pages, Etc.)	
									
				 					
							_		
EXAMINER				DATE CONSIDERED)				

(2-92)

Form PTO-1449			Docket Number (Optional) Application Number					
INFORMATION DISCLOSURE CITATION			3592.8US (97-0321.08/US) Not yet assigned					
IN AN APPLICATION			Applicant David R. Hembree					
	(Use several sheets	if necessary)		Filing Date July 22, 20	03	Group Art Ur	nit Unkno	wn
U.S. PATENT DOCUMENTS								
EXAMINER INITIAL	DOCUMENT _NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	5,379,186	01/1995		Gold et al.				
	5,379,187	01/1995		Lee et al.				
	5,379,191	01/1995		Carey et al.				
<u> </u>	5,385,869	01/1995		Liu et al.				
	5,387,554	02/1995	·	Liang				
	5,394,303	02/1995		Yamaji				
	5,396,403	03/1995	Patel					
	5,432,127	07/1995	Lamson et al.					
	5,432,675	07/1995	Sorimachi et al.					
	5,434,105	07/1995	Liou		 			
	5,436,203	07/1995	Lin)			
		FOREIGN	N PATEN	T DOCUMENTS	·			,
	DOCUMENT NUMBER	DATE	COUNTRY		CLASS	SUBCLASS		slation
	Nombek			_ 	[[YES	NO
					l			
	<u> </u>					ļ		
		OTI	HED DO	CUMENTS	<u> </u>	<u> </u>	<u> </u>	
· · · · · · · · · · · · · · · · · · ·		<u> Un</u>	HER DO	CUMENTS	(Inclu	ding Author, Title,	Date, Pertinen	t Pages, Etc.)
<u> </u>								
			<u></u>					
	 							.
	 							
								
EXAMINER				DATE CONSIDERED				
				nformance with MPEP § 6		e through citati	on if not	

Sheet 6 of 9

Form PTO-1449

INFORMATION DISCLOSURE CITATION IN AN APPLICATION

Docket Number (Optional) 3592.8US (97-0321.08/US)	Application Number Not yet assigned
Applicant David R. Hembree	

(Use several sheets if necessary) Filing Date July 22, 2003 Group Art Unit Unknown U.S. PATENT DOCUMENTS EXAMINER DOCUMENT FILING DATE DATE NAME CLASS SUBCLASS INITIAL NUMBER IF APPROPRIATE 08/1995 5,438,216 Juskey et al. 5,441,684 08/1995 Lee 5,450,283 09/1995 Lin et al. 5,455,200 10/1995 Bigler et al. 5,455,457 10/1995 Kurokawa 5,461,255 10/1995 Chan et al. 5,468,995 11/1995 Higgins, III 5,477,082 12/1995 Buckley, III et al. 5,488,254 01/1996 Nishimura et al. 5,489,538 02/1996 Rostoker et al. 5,489,801 02/1996 Blish, II 5,541,446 07/1996 Kierse FOREIGN PATENT DOCUMENTS Translation DOCUMENT DATE COUNTRY CLASS SUBCLASS NUMBER NO YES OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) **EXAMINER** DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Sheet 7 of 9 Docket Number (Optional) Application Number Form PTO-1449 3592.8US (97-0321.08/US) Not yet assigned INFORMATION DISCLOSURE CITATION Applicant David R. Hembree IN AN APPLICATION (Use several sheets if necessary) Filing Date July 22, 2003 Group Art Unit Unknown U.S. PATENT DOCUMENTS EXAMINER DOCUMENT FILING DATE DATE NAME CLASS SUBCLASS INITIAL NUMBER IF APPROPRIATE 5,552,635 09/1996 Kim et al. 5,579,573 12/1996 Baker et al. 5,594,282 01/1997 Otsuki 5,596,231 01/1997 Combs 5,598,034 01/1997 Wakefield 5,604,376 02/1997 Hamburgen et al. 5,610,442 03/1997 Schneider et al. 5,641,997 06/1997 Ohta et al. 5,652,461 07/1997 Ootsuki et al. 5,656,857 08/1997 Kishita 5,659,952 08/1997 Kovac et al. FOREIGN PATENT DOCUMENTS Translation DOCUMENT DATE COUNTRY CLASS SUBCLASS NUMBER YES NO **OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.) **EXAMINER** DATE CONSIDERED EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not

in conformance and not considered. Include copy of this form with next communication to the applicant.

(2-92)Sheet 8 of 9 Docket Number (Optional) Application Number Form PTO-1449 3592.8US (97-0321.08/US) Not yet assigned INFORMATION DISCLOSURE CITATION Applicant David R. Hembree IN AN APPLICATION (Use several sheets if necessary) Filing Date July 22, 2003 Group Art Unit Unknown U.S. PATENT DOCUMENTS DOCUMENT EXAMINER FILING DATE DATE NAME CLASS SUBCLASS INITIAL NUMBER IF APPROPRIATE 09/1997 5,663,106 Karavakis et al. 09/1997 5,672,548 Culnane et al. 10/1997 5,681,757 Hayes 5,701,034 12/1997 Marrs 01/1998 5,705,851 Mostafazadeh et al. 5,891,753 04/1999 Akram 5,898,571 04/1999 Mertol 05/1999 5,905,638 MacDonald, Jr. et al. 5,909,056 06/1999 Mertol 5,931,222 08/1999 Toy et al. 6,081,027 06/2000 Akram FOREIGN PATENT DOCUMENTS Translation DOCUMENT DATE COUNTRY CLASS SUBCLASS NUMBER YES NO **OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449

INFORMATION DISCLOSURE CITATION IN AN APPLICATION

Docket Number (Optional) 3592.8US (97-0321.08/US)	Application Number Not yet assigned
Applicant David R. Hembree	

IN AN APPLICATION (Use several sheets if necessary) Filing Date July 22, 2003 Group Art Unit Unknown **U.S. PATENT DOCUMENTS** DOCUMENT NUMBER EXAMINER INITIAL FILING DATE CLASS SUBCLASS DATE NAME IF APPROPRIATE 09/2000 Hembree 6,117,797 09/2000 Chiu et al. 6,121,680 6,229,204 05/2001 Hembree DiStefano et al. 6,232,152 05/2001 06/2001 Bollesen 6,249,436 06/2001 Bernier et al. 6,251,707 6,432,840 08/2002 Hembree 6,451,709 09/2002 Hembree 6,596,565 07/2003 Hembree FOREIGN PATENT DOCUMENTS Translation DOCUMENT DATE COUNTRY CLASS SUBCLASS NUMBER YES NO **OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.) DATE CONSIDERED **EXAMINER**

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.